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## Digital Distraction and Learning Outcomes: A Review Study on the Impact of Smartphone Usage on Students Academic Achievement

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### ABSTRACT

Now a day, technology is getting really Advance and it is becoming an essential part of our daily lives. The most rapidly growing technologies in the world are Smartphone, which is also known as mobile phone. Today Smartphone are the mobile device where people can easily access information from anywhere at the any time. Its provides various types of day to day information and it has transformed modern education by providing instant access to information and communication through using wide range of application and services such as email, web browsing, GPS navigation, social media , banking etc. This study examine the impact of Smartphone including positive as well as negative affects on students academic achievement and engagement through using secondary data like research article, reports etc. In many research studies found that excessive usage of Smartphone can negatively impact on student's academic achievement. At the same time this study will concludes that balanced usage of Smartphone and institutional policies which are important to minimize distraction and enhance student's achievement in their life.

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### 1.0 INTRODUCTION

In 1973 the first mobile phone was introduced by martin cooper. And In 1994, the first Smartphone (touch screen) was invented by Frank Canova, an engineer at IBM. A Smartphone is a mobile device which combines different functionality of mobile phone which allowing people to access a wide range of



application and services like web browsing, social media, photography, banking, gaming and streaming, GPS navigation, and internet based messaging apps like whatsapp, instgram, facebook, twitter etc. Smartphone creates learning more available, easy, literally at their fingertips. it is a tool which are widely used not only for communication and entertainment but also educational purposes where students acquire different types of knowledge and information through attending online learning, research, collaboration etc. it is also supports personalized learning, where students acquire information at their own pace and this types of learning provides opportunities for students to take control of their own learning and develop their ownership capabilities.

However along with these advantages, the misused of Smartphone has different types of disadvantages which called also digital distraction. Digital distraction, means diversion of attention of the students from learning due to over uses of social media, playing games etc .therefore understanding the impact of Smartphone on students, their academic achievement is essential for improving educational practices. Academic achievement means students academic performance or success in educational field like grade, results, participation, engagement, honesty etc. excessive and unregulated use of smart phone can creates classroom distraction, sometimes mental health impact, sleep disturbance, reduced focused, anxiety, depression, sometimes many students faced cyber bullying, privacy risk, lower grade in results etc. several research studies has shown that this types of distraction can negatively impact on students achievement.

### **1.01 STATEMENT OF THE PROBLEM:**

The statement is entitled as, **‘DIGITAL DISTRACTION AND LEARNING OUTCOMES: A REVIEW STUDY ON THE IMPACT OF SMARTPHONE USEAGE ON STUDENTS ACADEMIC ACHEIVEMENT.’**

### **1.02 OBJECTIVES OF THE STUDY:**

- 1) To study about the both positive and negative affects Of Smartphone usage on student’s academic achievement.
- 2) To provide important suggestions or recommendations to minimize digital distraction and improving students achievement.

### **1.03 SIGNIFICANCE OF THE STUDY:**

Firstly, this study is very much important for students because Smartphone have becoming an integral part of our life. Through the positive use of Smartphone students can achieve bright future; they



can achieve knowledge, good marks, and good academic participation. if they use negatively means excessive or unregulated use of Smartphone they can face different problem in their academic life such as reduced focused, low concentration , sleep disturbance, mental health impact and sometimes it creates privacy risk, cyber bullying etc. therefore this study will highlights that understanding positive role of Smartphone among students when used it appropriately.

Secondly it is significant for teacher, educator, parents because they can play a vital role in develop a positive digital use habits among children; they can also monitoring and guiding children's about Smartphone usage. Furthermore this study will helpful for policymakers to developing guidelines and implementing digital literacy programs for responsible Smartphone use in educational field.

## 2.0 REVIEW AND RELATED LITERATURE:

- **Douglas k. Duncan, angel R. Hoekstra, Bethany R. Wilcox (2012)** was conducted a survey on Digital devices, distraction, and student performance: does in class cell phone use reduce learning? The result found that negatively affects students learning outcome who use Smartphone or cell phone in the class and it also reduces attention during the lectures.
- **Maria Limniou (2021)** was conducted a survey on the effect of digital device usage on student academic performance: a case study, the results was found that the students who use excessive mobile application are more negatively affects or distracted from learning and show lower performance.
- **JAO Campos, Santos Rosa , Irene tong Nunez (2025)** was conducted a survey on the use of cell phones and its impact on the learning process the results showed that use of cell phone or Smartphone by the students inside classroom during class hours negatively affects their learning outcomes.
- **S. Irma (2020)** was conducted survey on the effect of Smartphone usage on student discipline, motivation and learning achievement. The results showed that high use of Smartphone lower the discipline, motivation, and learning achievement. In class vii has a negative relationship between Smartphone use and acceptable learning outcomes but in class viii Smartphone use rate is high but achievement still good.
- **Gila Albert, Shimon Fridkin, Delveski (2023)** was conducted a survey on Mobile phone distraction and its effects on academic performance of Israeli college students. The study found that when students mobile phone were turned off students performance better academically but when their phones were on they were more distracted. And students were affected by ADHD due to phone distractions.
- **MMN Chaturanga, JMDP jaysundara (2020)** was conducted a survey on impact of Smartphone usage on academic performance, the study results revealed that while Smartphone usage



helps students to improve communication and easily access learning resources, but reduces concentration, affects students lifestyles, and leading low academic performance.

- **Lusekelo kibona, Gervas Mgyaya (2015)** was conducted survey on Smartphone effects on academic performance of higher learning students. It's revealed that most social media addiction was increased among students but negatively impact on student's academic performance.
- **Iram Mushtaq (2024)** was conducted a survey on the impact of Smartphone on the academic performance of university students, it's revealed that Smartphone uses is widespread primarily for social media. Excessive use of Smartphone associated with distractions from the study.

### 3.0 METHODOLOGY:

- ❖ The present research study was based on secondary sources for data which is collected from research articles, books, journal, and online databases.
- ❖ In the present study the researcher used descriptive analytical approach, and focused on synthesizing findings from previous research, online database to understand the relationships between Smartphone uses, academic performance.

### 4.0 RESULTS OR FINDINGS:

The findings of the previous study indicate that over use of Smartphone contribute to digital distraction and negative impact on student's academic achievement. studies by Gila Albert, Shimon Fridkin, Delveski (2023) reveals that the students can actively concentrates on studies when their phone is off, but when their phone turn on they feel distracted from learning which creates risk of lower academic performance. Another studies Lusekelo kibona, Gervas Mgyaya (2015) reports that, excessive use of Smartphone can creates addiction to social media only like face book, whatsapp, twitter, instgram, YouTube etc which negatively affects on their study. However the findings reveals MMN Chathuranga, JMDP jaysundara (2020) that, through the Smartphone uses only develops their communication skill but never truly academic support, rather than its affects students mental health's conditions like ,sleep disturbance, anxiety, depression and also its affects on healthy lifestyle such as reduced habits of physical exercise, . Several studies (JAO Campos, Santos Rosa , Irene tong Nunez (2025), S. Irma (2020), Douglas k. Duncan, angel R. Hoekstra, Bethany R. Wilcox (2012), Maria Limniou (2021), Iram Mushtaq (2024) indicate that the students who excessive use of Smartphone in the classrooms or outside the classroom negatively affects their academic achievement.

The data obtained from online, reveals that in India 90 to 97% of children's access mobile devices but among them 49% of children have access Smartphone, but only 39% of children's use Smartphone for their educational purpose. different types of government and global organizations like UNESCO,



**UNICEF, WHO, OECD** etc highlights that excessive use of Smartphone can affects students academic carrier, lifestyles etc. reports from **UNESCO** highlights that, 89% of students reduced academic performance, and 93% of children's affects sleep disruption and also 90.5% of children's reduced habits of physical exercise due to over use of Smartphone. Therefore this report suggests that to banning Smartphone use in school for improving academic life and protect from cyber bullying. In response, by March 2026, 58% of education system in the countries have implemented bans Smartphone in the school. Another report **UNICEF** reveals that in India only 48% of students use Smartphone for educational purpose. **OECD** stands for organization for economic cooperation and development which is an international organization reveals that, across 59% countries, student's attention diverted due to peer using phone, tablets, laptop in the school, the reports also highlights that in France, 43% of students feel anxious or nervous without their phones. Another organization report of **WHO** reveals that in recent findings found that across 44 countries, the rate of social media use increased from 7% in 2018, 11% in 2022. and also found that 12% adolescents are faced risk of problematic gaming, 34% of students involve in daily gaming, 22% of students spend at least 4 hours on gaming in a day.

Recent report by the **National institute of health** shows that, 67% of students in India feel anxious, depression and high stress level due to over addiction to Smartphone. 64-68% of students faced different types of physical problems like eye strain, blurred version, neck and back pain, also 50% of students faced sleep disorders due to late night mobile use. It's also reveals that different types of emerging disorders like '**Nomophobia**' means fear of being without phone and '**ringxiety**' means phantom vibration are increasing.

Overall the findings indicate that now a day's Smartphone are widely accessible among students because it is becoming an integral part of our human life, but excessive use of Smartphone can creates digital distraction and leads to negative effects on study.

## 5.0 DISCUSSION:

The above findings suggest that while Smartphone provide equitable and easily accessible information and educational resources at the same time their misuse can leads to different types of challenges like academic, lifestyle, mental health impact and disease etc. excessive or unregulated use of Smartphone can leads to feeling of anxious or depression due to being fear of without phone. it's also impact on students mental health like sleep disorders , anxiety, depression, low communication with peer and societies, low interest in play in the field and physical exercise etc. it can also lead to physical



problem like blurred version, eye strain, neck and back pain due to over use of Smartphone. All these findings are consistent with global report, online data base and also previous research studies.

## **5.0 POSITIVE AND NNEGATIVE IMP-ACT OF SMARTPHONE ON STUDENTS ACADEMIC ACHEIVEMENT:**

There are both positive and negative impacts on student's academic achievement. When students use it effectively, it helps to enhance learning outcome, if they misused, it leads to various challenges on educational achievements.

### **POSITIVE IMPACT:**

- **ACCESS TO INFORMATION:** Smartphone provides equitable and easily accessible opportunities for all students, where students can achieve knowledge and information from anywhere or any place at any time and there have different types of platforms like goggle drive which help students to store and access file anytime and anywhere when they require.
- **IMPROVED COMMUNICATION:** Through the use of Smartphone students can easily contact with peers and teachers for clarification of doubts. And students can also create group chats on apps like whatsapp, telegram, and gogle classroom to discussing their assignment, seminar which also helps to develop collaboration between them and enhance communication.
- **TIME MANAGEMENT:** Smartphone can allow students to learn from anywhere at any place, therefore it reduces transportation cost. There have different types of apps like goggle calendar which helps to plan classes, exam and study time etc.
- **ACCESS TO E- BOOKS AND DIGITAL LIBRARIES:** E- books and digital libraries are the those types of tools where students can achieve information or knowledge at any time , it is open 24 into 7 hour , therefore Smartphone allows to get information when they require.
- **PERSONALIZEDE LEARNING:** Smartphone also supports personalized learning, where students can acquire learning on their own pace, this aspect of learning provide opportunities for students to control their own learning and develop their ownership capacity.
- **EDUCATIONAL VIDEOS AND TUTORIALS;** Smartphone supports students to use different types of features like YouTube, which provide free lectures and tutorials for the learner. It can be useful for students to manage self directed learning without help of teacher, educator.



### **NEGATIVE IMPACT:**

- **CLASSROOM DISTRACTION:** when students use Smartphone, social media, gaming or messaging during the class, its leads to distract attention from classroom which leads to negative impact on students learning achievement.
- **MOBILE ADDICTION:** Another negative impact of Smartphone is mobile addiction. excessive use of Smartphone can leads to addiction towards mobile phone sometime they feel anxious, depress due to fear of being lost of phone, so it making difficult to concentrate on study.
- **POOR TIME MANAGEMENT:** Due to overuse of Smartphone, social media, focusing on gaming, students can fail to manage time for the study. In that situation they spend lots of time to using Smartphone instead of academic activities, it can leads to negative impact on academic achievement.
- **LACK OF SOCIAL INTERATION:** through the use of Smartphone students creates virtual communication, they often prefer texting, chatting instead of real life communication. It can reduce emotional connection, and support and it also reduced co curricular activities, group discussion, and teamwork in the educational field.
- **LOWER ACADEMIC PERFORMANCE:** Due to overuse of Smartphone students cannot spend time properly on study therefore it leads to low academic performance, lower grade in results.
- **PHYSICAL AND MENTAL HEALTH ISSUES:** over use of Smartphone can create physical and mental health issues. Different types of physical issues such as eye strain, blurred version, neck pain, back pain and reduced physical exercise. And also mental health issues like, sleep disruption, anxiety, depression etc.

So, these are the both positive and negative impacts which are discussed in above.

### **6.0 CONCLUSION:**

The study concludes that Smartphone is mobile devices which play an active role in our life, now days Smartphone is getting becoming an integral part of our life, without Smartphone our life cannot imagine, therefore Smartphone plays a dual role in education or our life. It has both positive and negative impact. Excessive and unregulated use of Smartphone can leads to lower academic performance in the students life. It is completely dependable of our choice how can we use Smartphone. for example if students effectively use Smartphone for their educational purpose or benefits than it enhancing learning outcome, if students misused the Smartphone than they can faced different types of challenges including academic challenges like lower grade, reduced concentration, mostly sleep disruption due to late night mobile use. It's not only negative impact on academic life but also physical and mental health life, physical impact



such as reduced interest on physical exercise, eyestrain, blurred vision, neck pain, back pain etc at the same time it can be harmful for our mental health such as sleep disturbance, anxiety, depression etc. so , proper guidance, awareness and regulation are important for effective use of Smartphone by the students which leads to better academic support, and maintain good physical and mental health.

## **7.0 SUGGESTIONS\ RECOMMENDATIONS:**

- Parents should take care of their children's about use of Smartphone at home; and avoid giving Smartphone to their children's at very early stage; they should continuously monitor and control their children's habits.
- School should organize a periodic awareness program, workshop on digital addiction, responsible digital behavior and its negative impact on academic carrier.
- Curriculum planners should include in the syllabus about digital literacy, responsible digital behavior and negative impact of misused Smartphone on academic life etc.
- Students should encouraged by the teacher and parents about promote a good academic discipline by the maintaining a daily routine with fixed study time and limited phone time which helps to improve academic participation.
- Government should formulate clear national guidelines about Smartphone use in schools which helps to balance digital learning and digital distraction.
- Teacher training should be organized for develop digital pedagogy among teacher which helps them to manage effectively use Smartphone without causing distraction in the classroom.
- Government policies should be updated time to time on the basis of research findings publish on Smartphone use and its impact on academic performance.
- Encouraging students for productive use of smart phones like group discussion, seminar, shared notes, and project management apps rather than passive use.
- School, college and universities should take step for provide psychological counseling for the student who faced Smartphone addiction or addressing issues like anxiety, depression etc.

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